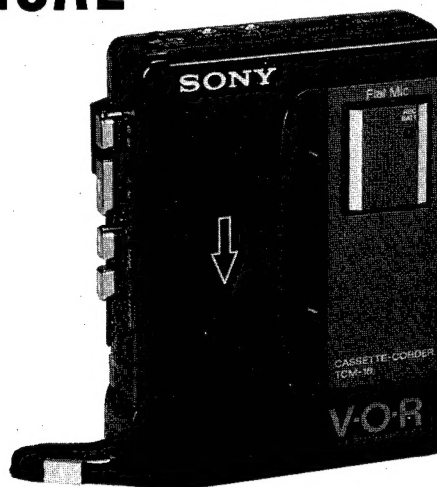


TCM-18V

SERVICE MANUAL

AEP Model



SPECIFICATIONS

Recording system 2-track 1-channel monaural.
Frequency response 100-8,000Hz
Speaker Approx. 3.6cm (1 ⁷/₁₆ inches) dia.
Power output (DC) 350mW (at 10% harmonic distortion)
Input Microphone input jack (minijack) sensitivity 0.2mV for 3k Ω or lower impedance microphone.
Output Earphone jack (minijack) for 8-300 Ω earphone
Power requirements 3V DC, two R6 (size AA) batteries
DC IN 3V jack accepts:
• Sony AC-D2M AC power adaptor (optional) 220V AC, 50Hz
• Sony DCC-70 car battery cord (optional) for use on 12V car battery.
Battery life (hours)

Battery	Recording
Sony battery SUM-3 (NS)	Approx. 2.5 hours
Sony alkaline battery AM3 (N)	Approx. 7 hours

Dimensions Approx. 91 x 119.2 x 38.3mm (w/h/d) (3 ⁵/₈ x 4 ³/₄ x 1 ⁹/₁₆ inches) incl. projecting parts and controls
Weight Approx. 260g (9.2oz) incl. batteries
Supplied accessories Carrying case (1)

Design and specifications subject to change without notice.

Model Name Using
Similar Mechanism Set

TCM-25
TCM-27

Tape Transport Mechanism Set

MT-18-06

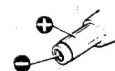
FEATURES

- **VOR system** economizes tapes, batteries and playback time.
- **Quick review function** to hear the just recorded sound.
- **Sony Boundary Effect system** to pick up the speaker's voice more clearly at the conference.

What is VOR (Voice Operated Recording) System?

With this system, recording starts only when the sound is picked up and stops automatically when the sound is no longer detected.

Note: If an AC power adaptor or a car battery cord not manufactured by Sony is used, a fuse must be installed in the AC power adaptor or the car battery cord and the polarity of the plug must be as illustrated.



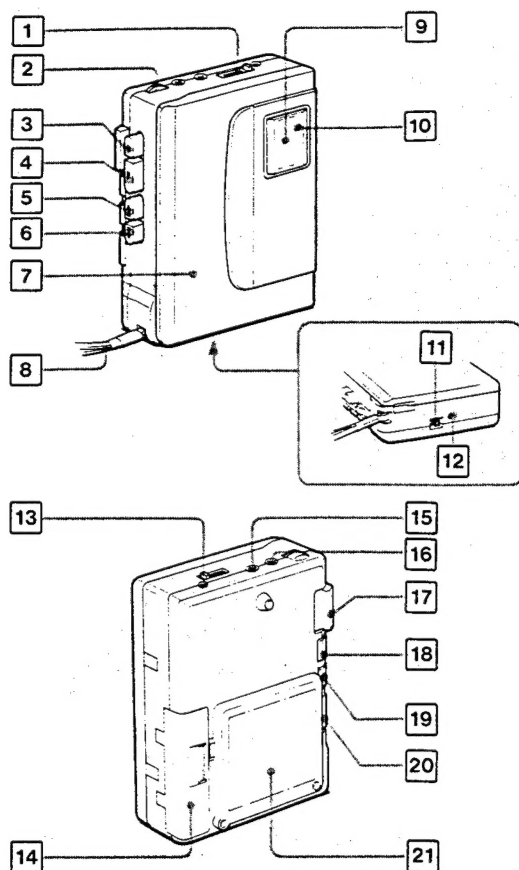
Polarity of Sony plug



CASSETTE-CORDER
SONY®

SECTION 1 GENERAL

PARTS IDENTIFICATION



- 1** COUNTER and reset button
For indexing the tape contents.
Before recording, push the reset button to set the COUNTER to "000".
- 2** VOLUME/VOR SENS (Voice operated recording sensitivity) 4 ~ 10 control
- 3** ● REC (recording) button
- 4** ▼ PLAY (playback) button
- 5** ▲ REW (rewind)/REVIEW button
- 6** ▼ FF (fast forward)/CUE button
- 7** Cassette compartment
- 8** Handstrap
- 9** Flat Mic (built-in microphone)
- 10** REC/BATT (recording/battery) indicator
- 11** TONE/MIC SENS (L/H) switch
- 12** DC IN 3V (external power input) jack
- 13** REMOTE jack
Pause or the other function will be operated when using this unit connected to an optional foot switch. But in this case, PAUSE switch on the unit cannot be operated.
- 14** Battery compartment
- 15** MIC (PLUG IN POWER) jack
- 16** EAR (earphone) jack
- 17** ■▲ STOP/EJECT button
- 18** VOR (Voice Operated Recording) (ON/OFF) switch
- 19** PAUSE switch
- 20** SPEED CONTROL (SLOW/ NORM/FAST) switch
- 21** Speaker

FLEXIBLE CIRCUIT BOARD REPAIRING

- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

NOTES ON CHIP COMPONENT REPLACEMENT

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

SECTION 2
MECHANICAL ADJUSTMENTS

PRECAUTION

- Clean the following parts with a denatured-alcohol-moistened swab:
record/playback head pinch roller
erase head rubber belts
capstan idlers
- Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.
- Power supply voltage: 3V dc.

Torque Measurement

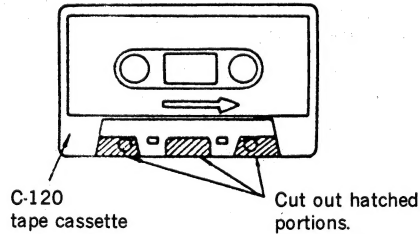
Torque	Meter Reading	Torque Meter
Forward	22-45g·cm (0.31-0.62oz·inch)	CQ-102C
Fast Forward and Rewind	50-100g·cm (0.69-1.39oz·inch)	CQ-201B
Back Tension	1.5-3.5g·cm (0.02-0.05oz·inch)	CQ-102C

Tape Tension Measurement

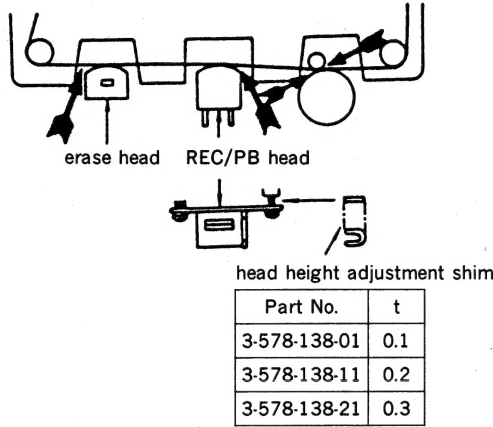
Meter	Meter Reading
CQ-403A	more than 110g (3.88oz)

Head Height Adjustment

- Prepare an adjustment cassette as shown below.



- In record mode and viewing from the front, adjust the head heights to eliminate tape curl and tape twist at portions of arrow.



SECTION 3
ELECTRICAL ADJUSTMENTS

3-1. TAPE RECORDER SECTION

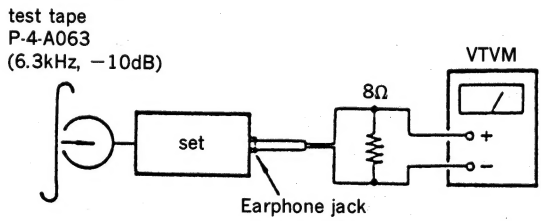
• Test Tape

Type	Signal	Used for
WS-48A	3kHz, 0dB	tape speed adjustment
P-4-A063	6.3kHz, -10dB	head azimuth adjustment

REC/PB Head Azimuth Adjustment

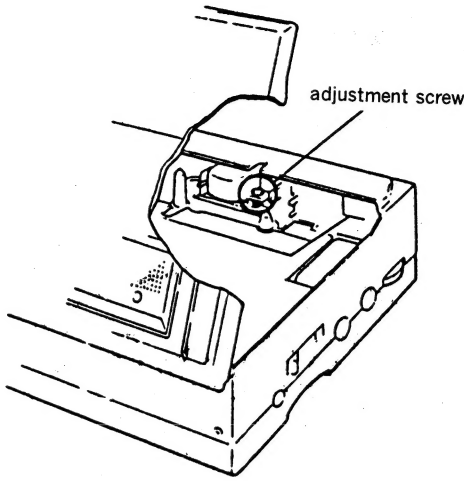
Procedure:

- Mode: playback

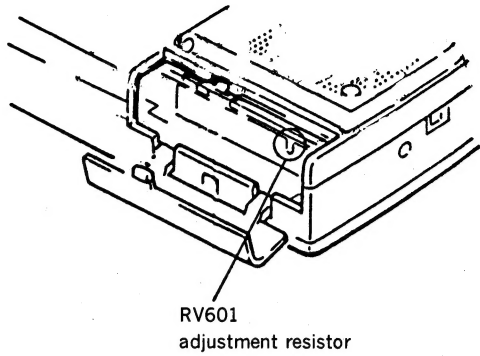


- Turn the adjustment screw to obtain the maximum reading on VTVM.
Note: Several peaks may appear, but take the maximum
- After the adjustment, lock the adjustment screw with suitable locking compound.

Adjustment Location:



Adjustment Location:

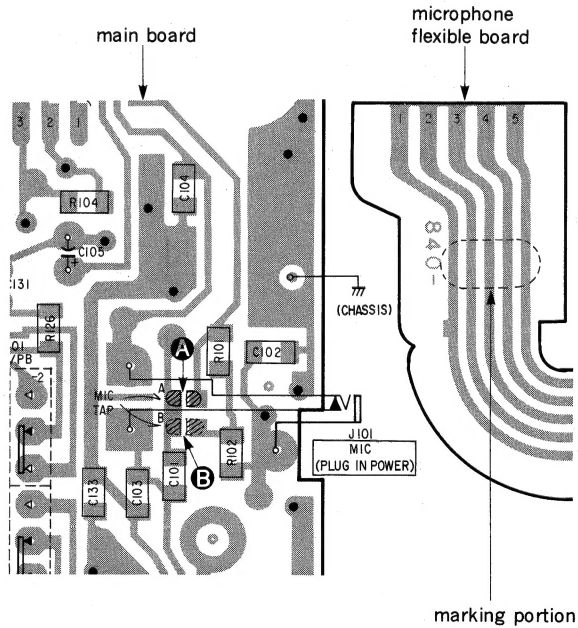


Microphone Sensitivity Adjustment

When replacing the microphone, perform this adjustment.

Mark of microphone flexible board	Pattern connection
With black marking	A
Without black marking	B

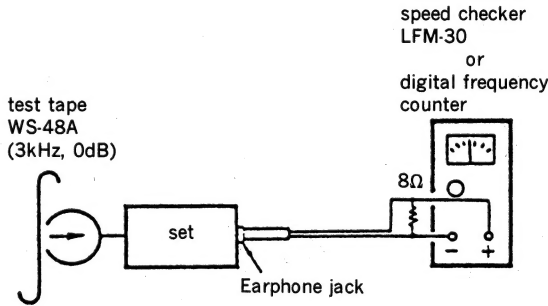
Adjustment Location: main board



Tape Speed Adjustment

Procedure:

Mode: playback



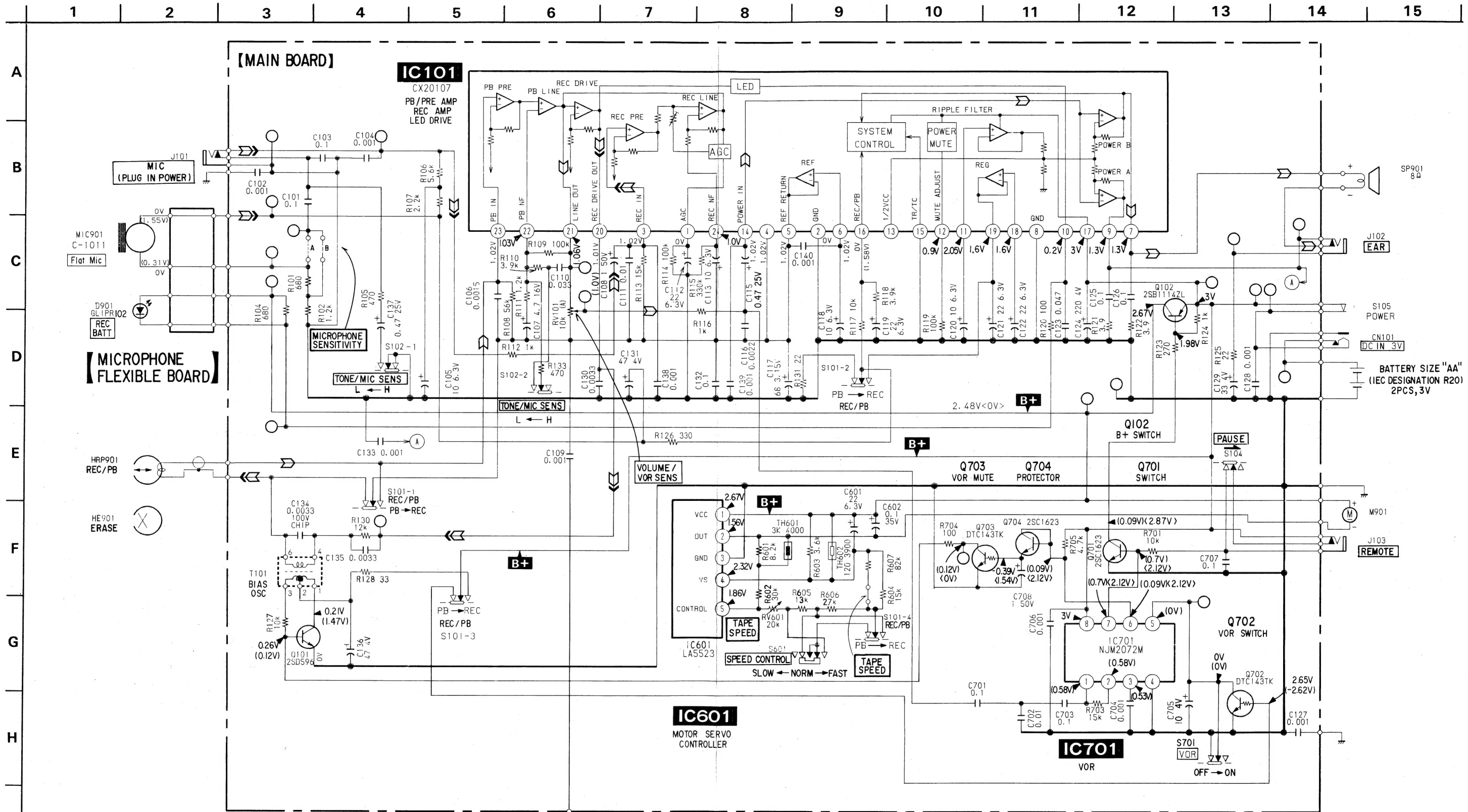
Adjustment Value:

Speed checker	Digital frequency counter
±1%	2,970-3,030Hz

Frequency difference between the beginning and the end of the tape should be within 1% (30Hz).


SECTION 4 DIAGRAMS

4-1. SCHEMATIC DIAGRAM



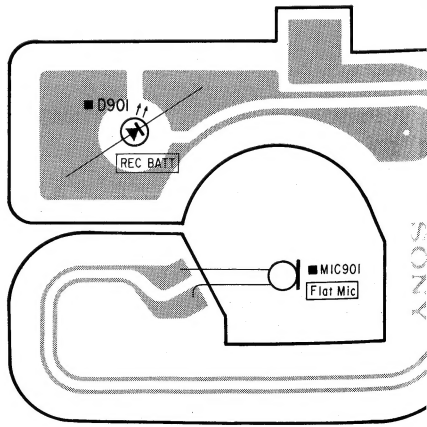
Note:

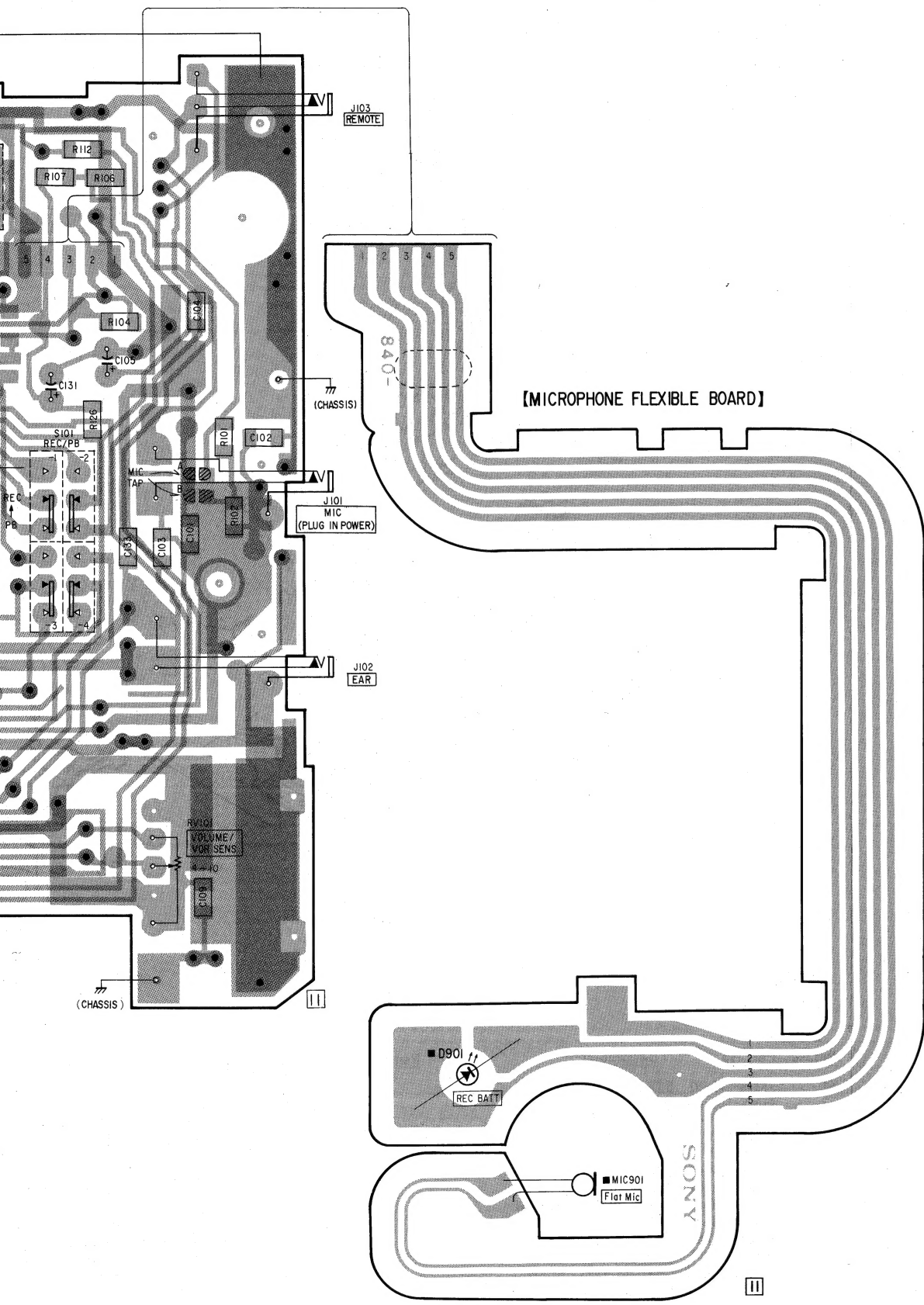
- All capacitors are in μF unless otherwise noted. pF: μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.

-  : adjustment for repair.
- Power voltage is dc 3V and fed with regulated dc power supply from external power voltage jack.
- Voltages are taken with a VOM (Input Impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.

- Voltage and waveforms are dc with respect to ground under no-signal conditions.
no mark : PB
(): REC
< >: PAUSE
- Signal path.
Σ : PB
Σ» : REC

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
--	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----

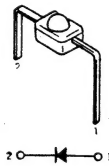




● Semiconductor Location

Ref. No.	Location
D901	H-14
IC101	C-8
IC601	B-3
IC701	F-8
Q101	B-10
Q102	D-7
Q701	F-8
Q702	F-9
Q703	C-10
Q704	C-9

● Semiconductor Lead Layouts

GL-1PR102

Note:

- — : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- □ → indicates side identified with part number.
- ● : Through hole.
- ▨ : Pattern on the side which is seen.
- ▩ : Pattern of the rear side.

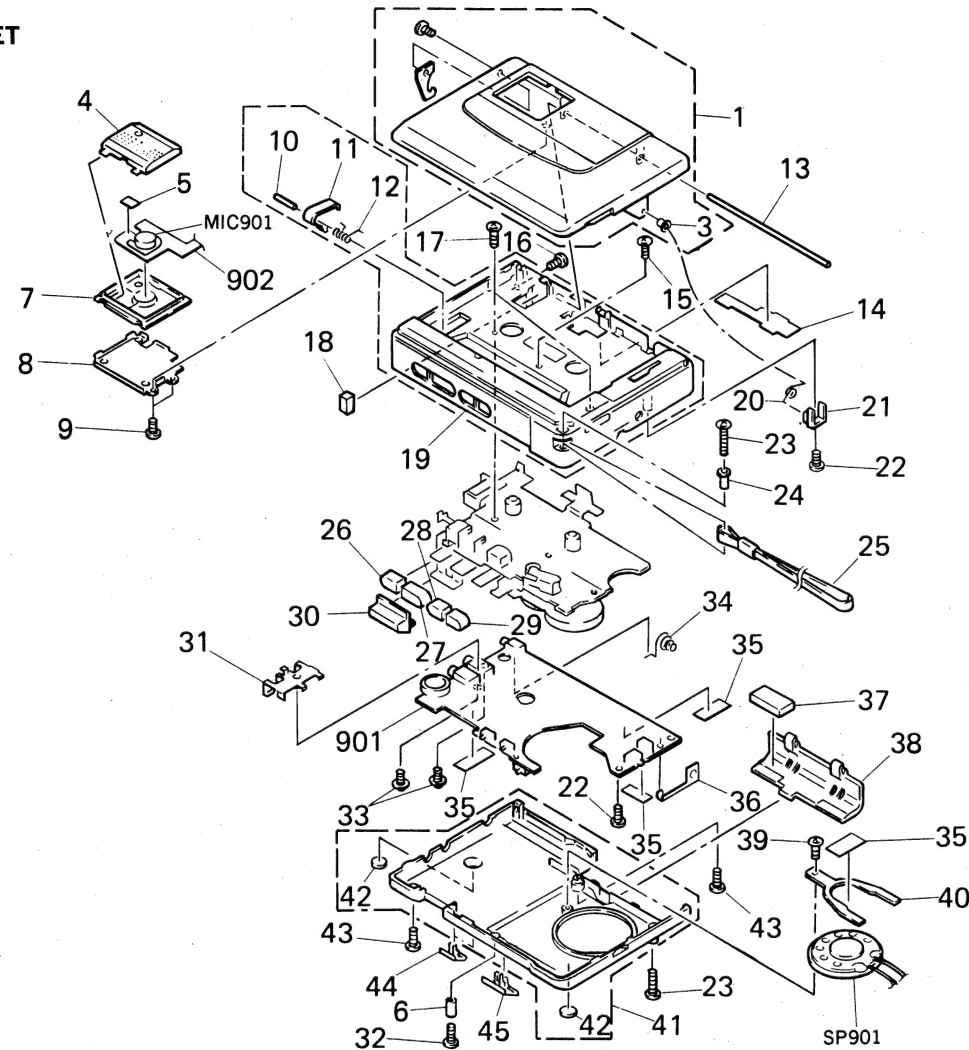
SECTION 5 EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

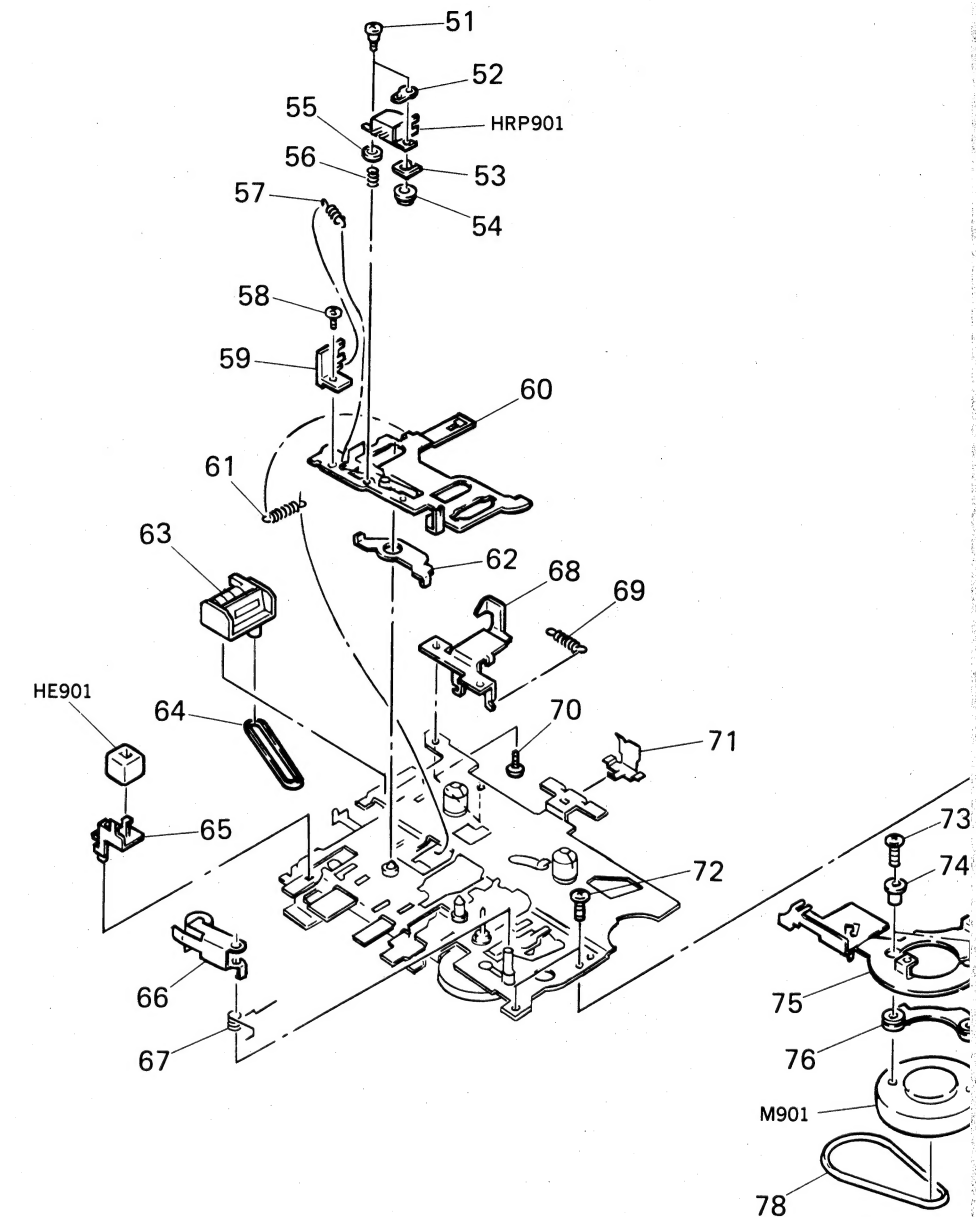
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
Example:
(RED) ... KNOB, BALANCE (WHITE)
↑ Cabinet's Color ↑ Parts Color

5-1. CABINET



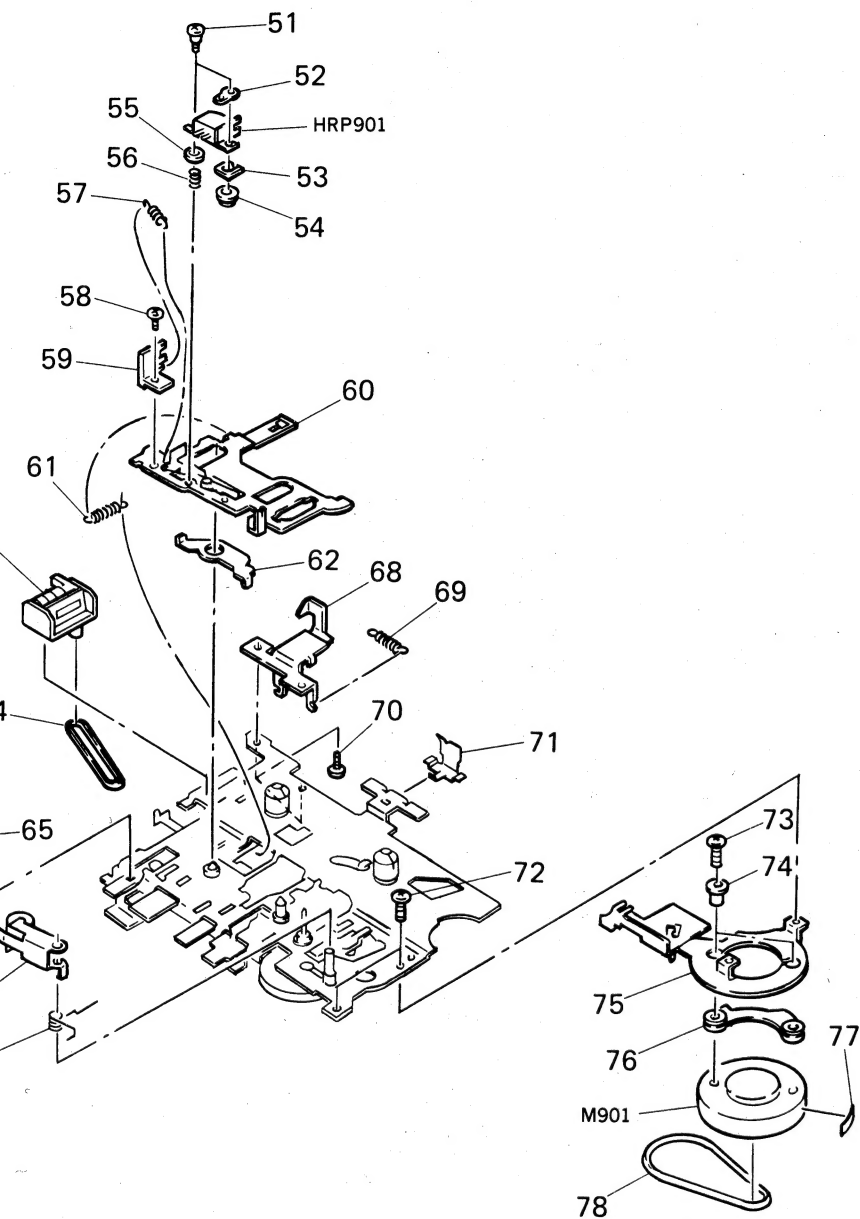
Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
1	X-3318-247-1	LID SUB ASSY, CASSETTE	3	26	3-346-439-11	BUTTON (REC)	
3	7-623-605-01	EYELET, 1.3X2.5		27	3-346-437-11	BUTTON (PLAY)	
4	X-3318-241-1	ORNAMENT ASSY, MICROPHONE		28	3-346-438-11	BUTTON (REW)	
5	3-831-441-XX	SPACER		29	3-346-435-11	BUTTON (FF)	
6	3-347-746-01	COLLAR		30	3-346-436-01	BUTTON (STOP)	
7	*3-320-972-01	CUSHION (B), MICROPHONE		31	*X-3328-370-1	REINFORCEMENT ASSY	
8	*3-346-426-01	RETAINER (MICROPHONE)		32	3-318-202-51	SCREW (M1.4X6), TAPPING	
9	3-318-382-21	SCREW (1.7X3), TAPPING		33	3-347-738-01	SCREW (M1.4X2.5), TAPPING	
10	3-703-357-06	PIN, PARALLEL (DIA. 1.6X14)		34	3-346-420-01	SPRING	
11	3-321-022-01	LEVER, EJECT		35	3-831-441-11	CUSHION (B)	
12	3-318-215-01	SPRING		36	3-346-418-01	TERMINAL BOARD, BATTERY	
13	*3-576-075-31	SHAFT, CASSETTE HOLDER		37	9-911-815-01	CUSHION	
14	*3-347-731-11	PLATE, BLIND		38	3-313-559-11	LID, BATTERY CASE	
15	3-318-204-91	SCREW (M1.7X4), TAPPING		39	3-342-512-11	SCREW (B1.7X3), TAPPING	
16	3-318-203-11	SCREW (B1.7X6), TAPPING		40	*3-346-414-01	BRACKET (SPEAKER)	
17	3-318-204-71	SCREW (M1.7X5), TAPPING		41	X-3318-246-1	CABINET (REAR) ASSY	42
18	9-911-840-XX	SHEET, RUBBER		42	3-331-603-01	FOOT	
19	X-3318-245-1	CABINET (FRONT) ASSY	10~12	43	3-318-203-31	SCREW (B1.7X8), TAPPING	
20	3-329-169-01	SPRING, TORSION		44	3-346-433-01	KNOB (VOR, PAUSE)	
21	3-346-417-01	BRACKET (TOGGLE SPRING)		45	3-346-434-01	KNOB (SPEED CONTROL)	
22	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT		901	A-3015-775-A	MOUNTED PCB, MAIN	
23	7-685-107-19	SCREW +P 2X12 TYPE2 NON-SLIT		902	1-626-840-11	PC BOARD, MICROPHONE FLEXIBLE	
24	3-346-415-01	SPACER (STRAP)		MIC901	1-542-124-31	MICROPHONE, ELECTRET CONDENSER	
25	3-347-729-01	STRAP, HAND		SP901	1-503-293-00	SPEAKER	

5-2. TAPE TRANSPORT MECHANISM (1) (MT-18-06)



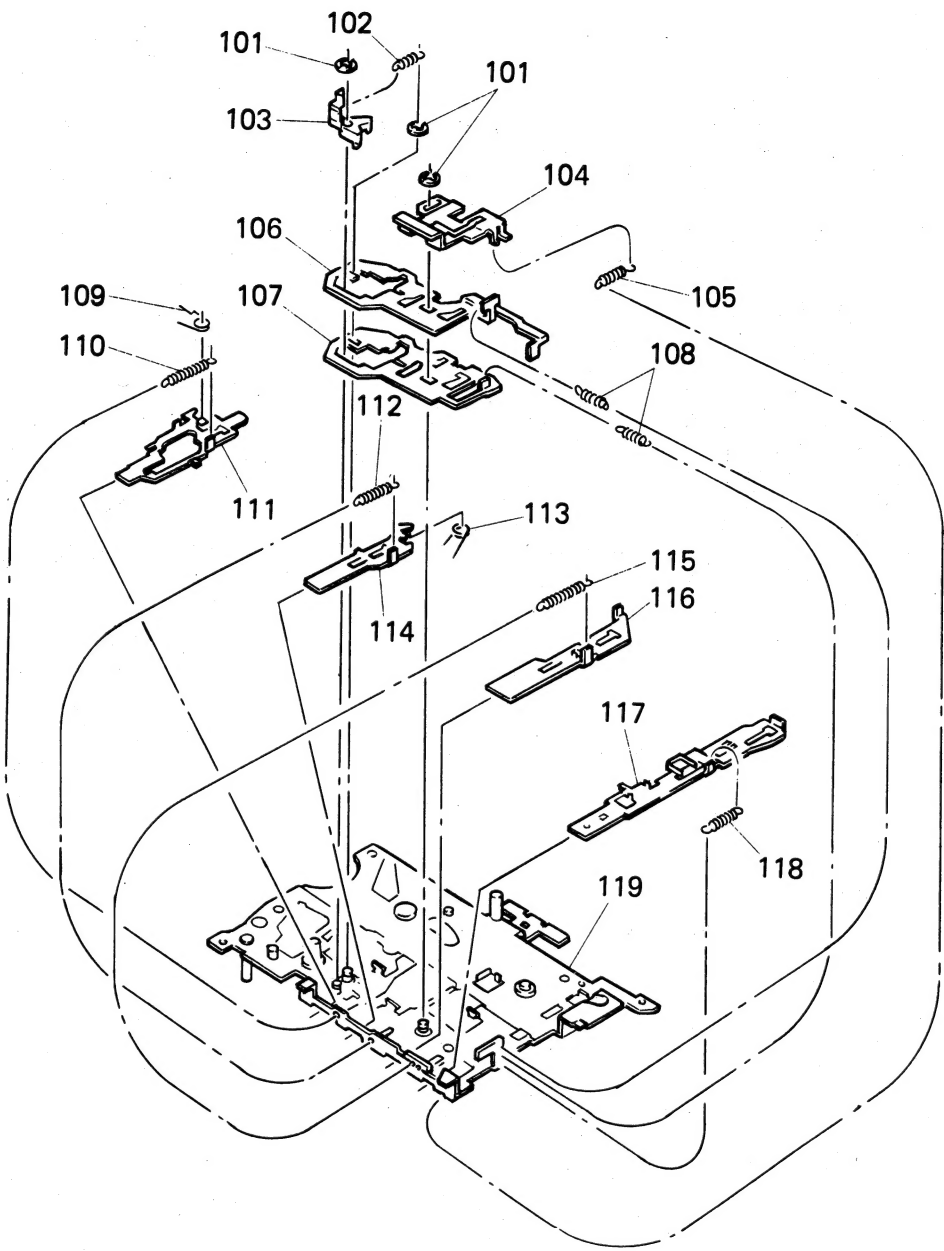
Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
51	3-318-240-01	SCREW (1.4), SPECIAL		66	A-3110-010-A	PINCH LEVER ASSY	
52	7-623-505-01	LUG, 2		67	3-347-739-01	SPRING	
53	3-578-138-01	SHIM (t=0.1)		68	*X-3328-364-1	LEVER (ERASING PROT)	
53	3-578-138-11	SHIM (t=0.2)		69	3-347-727-01	SPRING, TENSION	
53	3-578-138-21	SHIM (t=0.3)		70	7-627-852-37	PRECISION SCREW +P	
54	3-318-309-01	SPACER, HEAD		71	3-318-269-01	SPRING	
55	7-688-001-01	W 2, SMALL		72	7-627-553-17	PRECISION SCREW +P	
56	3-318-237-01	SPRING, COMPRESSION		73	7-627-852-17	+P 1.7X4	
57	3-318-238-01	SPRING, TENSION		74	3-325-385-01	SPACER, MOTOR	
58	7-627-552-87	SCREW, PRECISION P 1.7X2.2		75	X-3318-238-1	BRACKET ASSY	
59	3-318-287-01	GUIDE, TAPE		76	3-347-702-01	CUSHION (MOTOR)	
60	X-3328-358-1	CHASSIS ASSY, HEAD		77	3-831-441-XX	CUSHION	
61	3-565-927-00	SPRING, TENSION		78	3-347-753-01	BELT	
62	*3-318-267-01	LEVER, CR		HE901	8-658-096-02	HEAD, ERASE EBF5-36	
63	1-548-541-31	COUNTER		HRP901	1-543-410-11	HEAD, MAGNETIC (REC)	
64	3-318-239-01	BELT		M901	1-541-601-11	MOTOR	
65	3-318-285-01	BRACKET, ERASE HEAD					

MECHANISM (1)



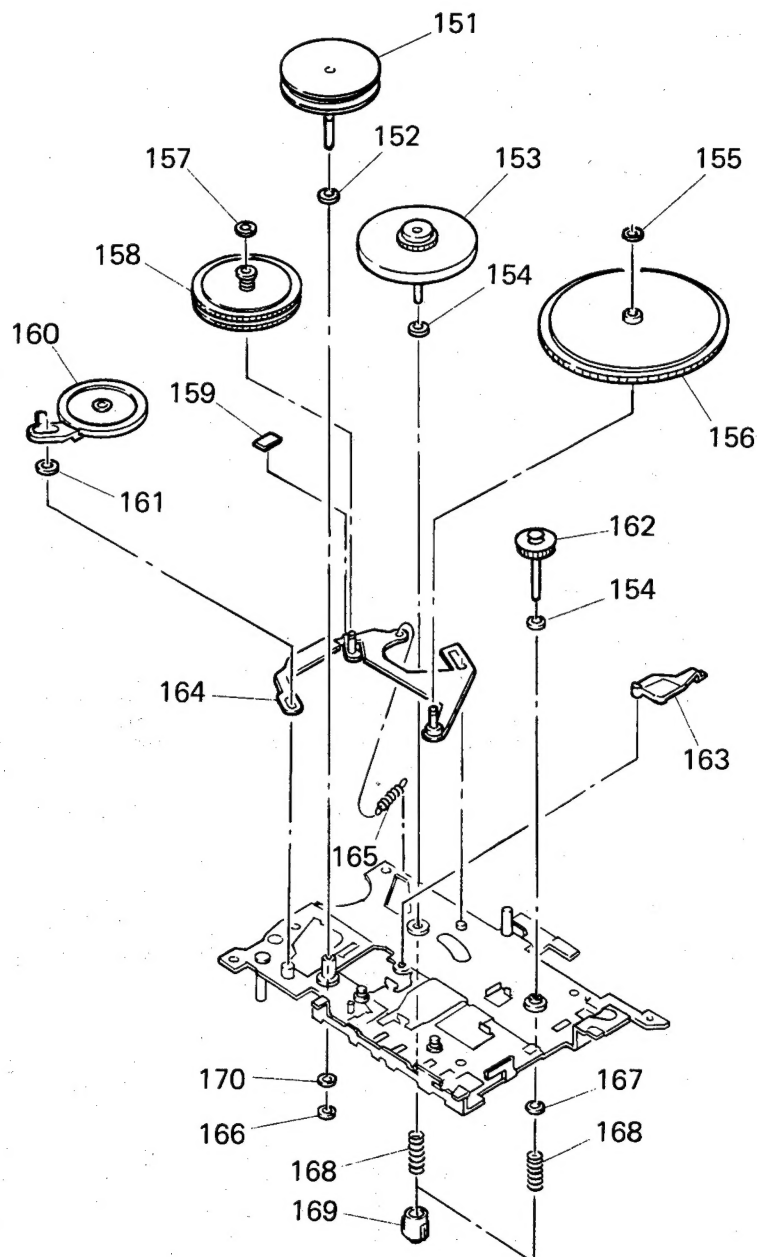
Remark	Ref.No	Part No.	Description	Remark
	66	A-3110-010-A	PINCH LEVER ASSY	
	67	3-347-739-01	SPRING	
	68	*X-3328-364-1	LEVER (ERASING PROTECTION) ASSY	
	69	3-347-727-01	SPRING, TENSION	
	70	7-627-852-37	PRECISION SCREW +P1.7X1.8TYPE3	
	71	3-318-269-01	SPRING	
	72	7-627-553-17	PRECISION SCREW +P 2X2 TYPE 3	
	73	7-627-852-17	+P 1.7X4	
	74	3-325-385-01	SPACER, MOTOR	
	75	X-3318-238-1	BRACKET ASSY	
	76	3-347-702-01	CUSHION (MOTOR)	
	77	3-831-441-XX	CUSHION	
	78	3-347-753-01	BELT	
	HE901	8-658-096-02	HEAD, ERASE EBF5-36	
	HRP901	1-543-410-11	HEAD, MAGNETIC (REC/PB)	
	M901	1-541-601-11	MOTOR	

5-3. TAPE TRANSPORT MECHANISM (2)
(MT-18-06)



Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
101	7-624-101-01	RING, RETAINING E-1.2		111	3-318-291-01	LEVER, FR	
102	3-318-351-01	SPRING, TENSION		112	3-318-251-01	SPRING, TENSION	
103	3-318-296-01	LEVER, SHUT-OFF		113	3-318-277-01	SPRING, REW	
104	*3-318-293-01	LEVER, STOP		114	3-318-292-01	LEVER, REW	
105	3-547-669-00	SPRING, TENSION		115	3-318-349-01	SPRING, TENSION	
106	3-318-300-01	LEVER, SWITCH		116	*3-318-290-01	LEVER, PLAY	
107	*3-318-294-01	PLATE, LOCK		117	*3-347-714-01	LEVER (REC)	
108	3-318-248-01	SPRING, TENSION		118	3-318-247-01	SPRING, TENSION	
109	3-318-276-01	SPRING		119	*X-3328-360-1	CHASSIS ASSY, MECH, OUTSERT	
110	3-318-250-01	SPRING, TENSION					

5-4. TAPE TRANSPORT MECHANISM (3) (MT-18-06)



Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
151	X-3328-357-1	FLYWHEEL ASSY		161	3-827-323-11	WASHER (DIA. 3.1)	
152	3-701-437-31	WASHER		162	X-3318-204-1	GEAR ASSY, REW	
153	X-3325-619-1	CLUTCH ASSY		163	3-318-288-01	ARM, FF	
154	3-701-437-21	WASHER		164	X-3318-208-1	LEVER ASSY, FR	
155	3-570-615-00	POLY-WASHER (DIA. 1.2)		165	3-347-752-01	SPRING, TENSION	
156	3-318-265-01	GEAR (B), FR		166	3-318-236-01	WASHER, POLY, SLIT	
157	3-578-265-11	WASHER, STOPPER		167	3-325-690-01	WASHER, B.T	
158	X-3318-207-1	GEAR (A) ASSY, FR		168	3-318-241-01	SPRING, COMPRESSION	
159	3-831-441-XX	SPACER		169	3-332-002-11	CLAW, S REEL	
160	X-3328-344-1	LEVER ASSY, FWD IDLER		170	3-701-437-11	POLY-SLIDER (A)	

SECTION 6 ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:MF: μ F, PF: μ PF.**RESISTORS**

- All resistors are in ohms.
- F: nonflammable

COILS

- MMH: mH, UH: μ H

SEMICONDUCTORSIn each case, U: μ , for example:UA....: μ A...., UPA....: μ PA....,UPC....: μ PC, UPD....: μ PD....

Ref.No	Part No.	Description
901	A-3015-775-A	MOUNTED PCB, MAIN
902	1-626-840-11	PC BOARD, MICROPHONE FLEXIBLE
CAPACITOR		
C101	1-163-038-00	CERAMIC CHIP 0.1MF 25V
C102	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V
C103	1-163-038-00	CERAMIC CHIP 0.1MF 25V
C104	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V
C105	1-126-157-11	ELECT 10MF 20% 6.3V
C106	1-163-011-11	CERAMIC CHIP 0.0015MF 10% 50V
C107	1-126-094-11	ELECT 4.7MF 20% 16V
C108	1-126-160-11	ELECT 1MF 20% 50V
C109	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V
C110	1-163-989-11	CERAMIC CHIP 0.033MF 10% 25V
C111	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V
C112	1-126-153-11	ELECT 22MF 20% 6.3V
C113	1-126-157-11	ELECT 10MF 20% 6.3V
C115	1-135-145-11	TANTAL. CHIP 0.47MF 20% 25V
C116	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V
C117	1-131-394-41	TANTALUM 68MF 10% 3.15V
C118	1-126-157-11	ELECT 10MF 20% 6.3V
C119	1-126-153-11	ELECT 22MF 20% 6.3V
C120	1-126-157-11	ELECT 10MF 20% 6.3V
C121	1-126-153-11	ELECT 22MF 20% 6.3V
C122	1-126-153-11	ELECT 22MF 20% 6.3V
C123	1-163-035-00	CERAMIC CHIP 0.047MF 50V
C124	1-124-434-00	ELECT 220MF 20% 4V
C125	1-163-038-00	CERAMIC CHIP 0.1MF 25V
C126	1-163-038-00	CERAMIC CHIP 0.1MF 25V
C127	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V
C128	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V
C129	1-124-431-00	ELECT 33MF 20% 4V
C130	1-163-015-00	CERAMIC CHIP 0.0033MF 10% 50V
C131	1-124-432-00	ELECT 47MF 20% 4V
C132	1-163-038-00	CERAMIC CHIP 0.1MF 25V
C133	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V
C134	1-164-182-11	CERAMIC CHIP 0.0033MF 10% 100V
C135	1-163-015-00	CERAMIC CHIP 0.0033MF 10% 50V
C136	1-124-432-00	ELECT 47MF 20% 4V
C137	1-135-145-11	TANTAL. CHIP 0.47MF 20% 25V
C138	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V
C139	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V
C140	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V
C601	1-126-153-11	ELECT 22MF 20% 6.3V
C602	1-135-070-00	TANTAL. CHIP 0.1MF 20% 35V
C701	1-163-038-00	CERAMIC CHIP 0.1MF 25V
C702	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V
C703	1-163-038-00	CERAMIC CHIP 0.1MF 25V
C704	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V
C705	1-135-157-21	TANTAL. CHIP 10MF 20% 4V
C706	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V
C707	1-163-038-00	CERAMIC CHIP 0.1MF 25V
C708	1-126-160-11	ELECT 1MF 20% 50V
CN101	1-507-723-00	JACK, EXTENTION POWER (DC IN 3V)

Ref.No	Part No.	Description
D901	8-719-918-65	DIODE GL-1PR102
HE901	8-658-096-02	HEAD, ERASE EBF5-36
HRP901	1-543-410-11	HEAD, MAGNETIC (REC/PB)
IC101	8-752-010-71	IC CX20107
IC601	8-759-801-12	IC LA5523
IC701	8-759-701-52	IC NJM2072M
J101	1-563-319-21	JACK (MIC)
J102	1-563-319-21	JACK (EAR)
J103	1-507-933-11	JACK (REMOTE)
M901	1-541-601-11	MOTOR
MIC901	1-542-124-31	MICROPHONE, ELECTRET CONDENSER
Q101	8-729-159-64	TRANSISTOR 2SD596
Q102	8-729-805-25	TRANSISTOR 2SB1121
Q701	8-729-100-66	TRANSISTOR 2SC1623
Q702	8-729-900-98	TRANSISTOR DTC143TK
Q703	8-729-900-98	TRANSISTOR DTC143TK
Q704	8-729-100-66	TRANSISTOR 2SC1623
RESISTOR		
R101	1-216-045-00	METAL GLAZE 680 5% 1/10W
R102	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W
R104	1-216-045-00	METAL GLAZE 680 5% 1/10W
R105	1-216-041-00	METAL GLAZE 470 5% 1/10W
R106	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W
R107	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W
R108	1-216-091-00	METAL GLAZE 56K 5% 1/10W
R109	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R110	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W
R111	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W
R112	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R113	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R114	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R115	1-216-109-00	METAL GLAZE 330K 5% 1/10W
R116	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R117	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R118	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W
R119	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R120	1-216-025-00	METAL GLAZE 100 5% 1/10W
R121	1-216-306-11	METAL GLAZE 3.9 5% 1/10W
R122	1-216-306-11	METAL GLAZE 3.9 5% 1/10W
R123	1-216-035-00	METAL GLAZE 270 5% 1/10W
R124	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R125	1-216-009-00	METAL GLAZE 22 5% 1/10W
R126	1-216-037-00	METAL GLAZE 330 5% 1/10W
R127	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R128	1-216-013-00	METAL GLAZE 33 5% 1/10W
R130	1-216-075-00	METAL GLAZE 12K 5% 1/10W
R131	1-216-009-00	METAL GLAZE 22 5% 1/10W
R133	1-216-041-00	METAL GLAZE 470 5% 1/10W
R601	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W

Ref.No	Part No.	Description	Remark		
R602	1-216-084-00	METAL GLAZE	30K	5%	1/10W
R603	1-216-062-00	METAL GLAZE	3.6K	5%	1/10W
R604	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R605	1-216-076-00	METAL GLAZE	13K	5%	1/10W
R606	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R607	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R701	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R703	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R704	1-216-025-00	METAL GLAZE	100	5%	1/10W
R705	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
RV101	1-238-253-11	RES, VAR, CARBON 10K/10K (VOLUME/VOR SENS)			
RV601	1-238-378-11	RES, ADJ, CARBON 20K			
S101	1-554-745-11	SWITCH, SLIDE (REC/PB)			
S102	1-571-478-11	SWITCH, SLIDE (TONE/MIC SENS)			
S104	1-571-620-11	SWITCH, SLIDE (PAUSE)			
S105	1-554-297-00	SWITCH, LEAF (POWER)			
S601	1-570-386-11	SWITCH, SLIDE (SPEED CONTROL)			
S701	1-554-667-00	SWITCH, SLIDE (VOR)			
SP901	1-503-293-00	SPEAKER			
T101	1-433-251-00	TRANSFORMER, BIAS OSCILLATOR			
TH601	1-800-200-00	THERMISTOR			
TH602	1-807-193-11	THERMISTOR (POSITIVE)			

Ref.No	Part No.	Description	Remark
ACCESSORIES & PACKING MATERIALS			

*3-329-138-01		CUSHION (UPPER)	
*3-329-139-01		CUSHION (LOWER)	
3-329-156-01		CASE, CARRYING	
*3-329-157-01		INDIVIDUAL CARTON	
3-570-631-61		BAG, POLYETHYLENE	
3-750-447-11		MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE)	
3-750-447-41		MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN)	